

# The Impact of the Mediating Role of Green Organizational Culture on the Relation between Human Resources Green Competencies and Organizational Environmental Performance in Major Palestinian Governmental Hospitals in the Gaza Strip

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# Abstract

This study aims at shedding light on the reality of human resource green competencies in Palestinian government hospitals in the Gaza Strip, clarifying the role of those competencies in improving organizational environmental performance. Furthermore, it clarifies the impact of green organizational culture on the relation between human resource green competencies and organizational environmental performance. The descriptive analytical approach was adopted. In addition, a questionnaire was designed to collect data from employees who work at nursing and administrative fields in government hospitals using two-stage cluster sample.

Major conclusions indicated that the HR green competencies are weak among employees in the sampled hospitals. Moreover, there is a clear weakness in organizational environmental performance. In addition to weak green organizational culture.

Eventually, it is recommended to design and initiate a clear environmental strategy and objectives. Furthermore, promote efforts to disseminate and encourage green culture, values, and beliefs among employees. Moreover, there is a need to develop and adopt practical and applicable green HRM functions. Also, educate and train employees to develop employees' green competencies. In addition, to increase employees' involvement and participation in green activities and solve environmental issues.

*Keywords*: Human resource management - Green competencies – Green organizational Culture – organizational environmental performance.

# Introduction

Protecting environment is one of the most modern important trends in the 21st century. Many countries, organizations, and individuals in all over the world have started to work and behave within the spirit of green culture. This appears as a result of a need to save the planet and rescue it from environmental dangers that seriously affect all life. The green trend resurfaces in the world drives some organizations in several countries to move toward changing their strategies to adopt green strategies. Therefore, this matter required modifying cultures on the grounds of environmental protection necessity.

Green competencies is a new aspect that appeared in 1990s, and defined as "competence in relation to the environment" (Trott, 2013). These green competencies play significant role in directing organizational

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vision of people regarding their organizations. In this era which called the era of sustainability all organizations and employees are in need to adopt green fundamental competencies. These green competencies create individuals who have ability to distinguish between traditional ways of dealing with environmental problems and issues and the modern means, habits, behaviors, and techniques that they ought to accept and use to be environmentally friendly persons within and outside their organizations.

Creating green life and supporting green competencies make organizations and individuals in the Palestinian society face significant challenges. These challenges require real change in cultures, behaviors, and values and to reduce or eliminate erroneous behaviors related to environmental protection. This is applicable for many organizations like industrial and manufacturing organizations, as well as, other organizations like health organizations such as hospitals as there is different kind of used materials, disposals, and many other things that might be very harmful to environment.

Therefore, the researchers intend to shed light on HR green competencies role in enhancing Organizational environmental performance. Also, how this is influenced by adopting green organizational culture in major hospitals.

# **Study Problem Statement**

The world witnesses a born of a new concept appears as a result of integration between human resource management and environment management; that is called green human resource management. This main concept leads some researchers to search about other sub-concepts such as green competencies. The researchers in this study try firstly to have general information about the reality of applying green human resource management in Palestinian governmental hospitals. In addition to investigating the availability of green competencies among staff of those organizations. As according to phone interview, the Ministry of Health conducted training courses via video conference in the last years, also there are electronic models such as; training in private clinic, leave request, and health insurance (Jabir, 2016). However, the researchers understand that there is a problem should be discussed deeply. This leads to study the relation between human resource green competencies and environmental performance with regard to green culture.

Accordingly, the research main question is "What is the impact of the mediating role of green organizational culture on the relation between human resources green competencies and organizational environmental performance in major Palestinian governmental hospitals in the Gaza Strip?".

# **Study Variables**

The study variables are:

- 1- The independent variable: Human resources green competencies.
- 2- The dependent variable: Organizational environmental performance.
- 3- The mediator variable: Green organizational culture.

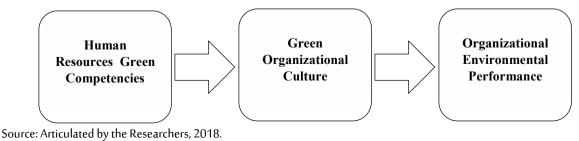


Figure (1) - Study Variables

# Study Hypotheses:

The study hypotheses are:

- 1- There is a statistical significant relationship at level  $\alpha \le 0.05$  between human resources green competencies and organizational environmental performance.
- 2- There is a statistical significant impact at level  $\alpha \le 0.05$  of green organizational culture on the relation between human resources green competencies and organizational environmental performance.

# Study Objectives

This study aims to achieve the following objectives:

- 1- To determine the level of availability of green human resources competencies in the governmental hospitals.
- 2- To determine the influence of green organizational culture on human resource green competencies and its relation to the organizational environmental performance.
- **3-** To identify obstacles, barriers, and other difficulties hindering the efforts of governmental hospitals from achieving positive results related to organizational environmental performance.
- 4- To provide recommendations to the ministry of health and the management of governmental hospitals to develop its green performance through overcoming different weaknesses related to the study area.

# Study Importance

The study importance aspects are:

- 1- Present useful information and reference to other researchers and academic institutions related to Green HRM applications, which will help to initiate farther advanced research in the area.
- 2- Present useful information and reference to professionals interested in the study area, which will help to induce developments in the related area.
- **3-** Provide professional solutions to the problems discovered by the research that will lead to improvements related to environmental performance.
- 4- In general, this study is expected to contribute to the proper maintenance of the Palestinian environment and the health of the community through effective enhancement of the awareness in the related area.

# Literature and Previous Study Preview

# The Human Resource Green Competencies

The meaning of competency as a concept had several views and defined differently. For example Cardy & Selvarajan (2006) defined competency as "The combination of resources and capabilities in an organization". Where, Hsu & others (2006) defined it as "a complex combination of knowledge, attitudes and skills demonstrated by individuals that are critical to the effective and efficient function of an organization". Moreover, Cardy and Selvarajan (2006) believed that competency as a concept considered as "central" between two fields which are strategy and HRM. As competencies allow the concept of strategic intent to be operationalized. Regarding the strategy, it deals with competencies related to resources and capabilities at organization's levels. While HRM deals with competencies related to personal features and their effects on performance. While Boselie & Paauwe (2005) thought that competencies had a "positive" effect on the organization's act. Other researchers argued that employees should have special competencies to be qualified to deal with corporate problems. This study briefly focusses on main green human resource management functions which are:

- Green recruitment: The process of hiring candidates with knowledge, skills, approaches, and behaviors that identify with environmental management systems within an organization (Posarajan, 2018). Moreover, Grolleau & others (2012) pointed out that recruiting candidates, who had responsibility towards protecting environment, positively affected several issues such as:
- a- Quality. b- Financial resources. c- Organizational structure. d- Reputation.
- 2- Green training: According to Ahmad (2015), "it is the need of the hour, since it contributes to create well educated employees and socially responsible persons, who could adopt green practices". Green training is a notable leap not only for employees themselves, but also for their organizations. Green training and development enhance employees' social responsibility regarding the use of organizations' resources (Zoogah, 2011).
- 3- Green performance appraisal: Defined as "evaluating an employees' current and / or past performance relative to his or her performance standards" (Dessler, 2014). According to Sahu (2009), performance management has three important dimensions affected on the process of evaluating employees' performance which were:
  - a- Doings at work b- The way of performing work "behavior" c- The final output. Measuring employees' green performance leads to achieve sustainability since it encourages them to improve organization's performance.
- 4- Green compensation: Defined as "a strategic process of compensating individuals for the work they perform in such a way that organizations is able to attract, retain, and motivate them to perform well, keeping in view organizational and market factors (Deb, 2009). According to Renwick & others (2013), there were several Green HRM practices related to the compensation system, which is divided into two categories:
  - a- Financial incentives, for example: bicycle loans, use of less polluting cars.
  - b- Non-financial rewards such as: paid vacation, time off, gift certificates.

Green human resource functions were studied locally by Masri & Jaaron, (2017) titled "Assessing green human resources management practices in Palestinian manufacturing context: An empirical study". It aimed at evaluating and assessing the effect of applying six essentials Green HRM practices in 130 organizations in three industrial sectors in West Bank in Palestine, which are food, chemical, and pharmaceutical sectors. Furthermore, it tested the relationship between environmental performance and green HRM practices. The study concluded that there was a strong relationship between green HRM practices in the degree of effect on environmental performance. It also found that there was disparity between several green practices in the degree of effect on environmental performance. Green recruitment was more effective than green training on environmental performance. Green recruitment was at the top of the list, while training was at the bottom.

Regarding the forms of competencies, Hsu & others (2006) mentioned seven "Cross-Cutting Competencies" specialized for employees in healthcare field, which are

- 1- Recognize a potential critical event and implement initial actions.
- 2- Apply the principles of critical event management.
- 3- Demonstrate critical event safety principles.
- 4- Understand the institutional emergency operations plan.
- 5- Demonstrate effective critical event communications.
- 6- Understand the incident command system and staff role in it.
- 7- Demonstrate the knowledge and skills needed to fulfill staff role during a critical event.

According to Ramus (2002), employees' effective participation in environmental protection doings depended on two elements:

- 1- Applicable working policies related to environmental issues.
- 2- Flexible control systems.

The study of, Hong & others (2006) highlighted the influence of "internal motivation" as an important factor that helped employees to contribute in achieving perceptible and constant progress to implement environmental protection agendas effectively.

Another study talking about competencies was the study of (Daniel & Amrik, 2013) under title "Supply chain professionals: A study of competencies, use of technologies, and future challenges". It aimed at shedding light on the competencies of managers who work in supply chain, and the technologies they used and focused on modern issues related to environment. The study found that there were two significant competencies in the field of incorporation of supply chain management which were "communication and teamwork". Moreover, wide knowledge of modern technologies was another major competency for that field. However, the supply chain managers studied showed low usage of these competencies.

# Green Organizational Culture

According to Harris & Crane (2002) green organizational culture is the extent to which the assumptions, values, symbols and artifacts of the organization reflected a desire or need to operate in an environmentally sustainable manner. As protecting environment needs to support new values, beliefs, and behaviors. While according to Fayyazi & others (2015) green practices let organizations enjoys many distinguished benefits such as minimizing costs, increasing employee satisfaction, achieving high level of performance, building strong teamwork spirit, and developing organizational culture.

The importance of green organizational culture is also illustrated by the study of (Jose & Jabbour, 2011) titled "How Green are HRM Practices, Organizational Culture, Learning and Teamwork? A Brazilian Study". The study confirmed the importance of building strong green teamwork spirit among employees by investigating the level of applying some green concepts, which are "green organizational culture, green learning, and green teamwork". It also aimed at evaluating the degree of green HRM practices in 94 Brazilian companies that have ISO 14001 certificate. The study found that the constancy of human resource practices is very important to make employees adjust to green management. Moreover, the separation between environmental issues and usual human resource practices and stopping formalizing these issues could lead to bad results. Also, it found that the less organizations formalize environmental issues and include them in usual human resource practices, the more likely they achieve bad results in creating teams with high performance, and spreading good green learning and green organizational culture.

In fact, the human resource departments in organizations were considered as "the keeper of the culture". This vision made employees in HR department to participate in developing the culture of their organization and employees. Designing employees' culture in light of environmental protection is a very important matter calling for senior managers' attention. Hence, creating green organizational culture is the basis on which a normal organization relies on to become a green organization (Liebowitz, 2010).

Focusing on the relation between three concepts which are "green organizational culture, green innovation, and competitive advantage" was the main aim of (Gürlek & Tuna, 2018) study titled "Reinforcing competitive advantage through green organizational culture and green innovation". It targeted managers and employees work in hotels in Antalya city in Turkey. The study concluded that green innovation and competitive advantage were positively affected by green organizational culture. Also, green innovation played the role of mediator in the effect relationship between green organizational culture and competitive advantage.

## Organizational Environmental Performance

According to Trumpp & Guenther (2017) organizational environmental performance is "the results of an organization's management of its environmental aspects". Some researchers presented an important system that guides management to form strategies, achieve objectives, and assess and monitor environmental performance (Blass & others, 2016). They divided the proposed system into three stages which include eight steps as follows:

- 1- The first stage was forming the initial "conception" divided into three steps, which are:
  - a- Assess the environmental conditions. b- Determine specific environmental goals.
  - b- Turn these goals into three kinds of measures; "strategic, tactical, and operational.
- 2- The second stage according to is putting these goals into practice through two steps, which are:
  - a- Set indicators to monitor the accomplishments of specified goals.
  - b- Put "strategies, tactical, and operational" measures into practice.
- 3- The third stage is analyzing the process through three steps, which are:
  - a- Examine the accomplishments. b- Verify results. c- Write the final report.

Organizations could accomplish their environmental goals well by changing "human capital" using the following three points (Rae & others, 2015).

- 1- Creating employees who have high commitment rate.
- 2- Presenting training programs that help employees to contribute to achieve environmental goals.
- 3- Executing well-organized environmental performance evaluation process.

Many researchers studied the relationship between green human resource management and environmental performance. The study of (Wagner, 2013) titled "Green Human Resource Benefits: Do They Matter as Determinants of Environmental Management System Implementation? " aimed at testing green HRM functions, and their benefits in the process of implementing environmental management systems. It also tries to measure the relationship between HRM and sustainability. The study targeted 581 small and large industrial German firms. The sample was the directors, environmental managers, quality managers, and HR managers. The study concluded that There was a positive effect of employee satisfaction and recruitment / retention on the implementation of environmental management systems. Moreover, there were different levels of effect between the independent variables on the implementation of environmental management systems. The influence of employee satisfaction on the process of implementing EMS was greater than recruitment / retention.

Furthermore, the importance of creating employees' commitment, conducting training programs, and evaluating green performance is confirmed by the results of (Erdogan & Baris, 2007), study titled "Environmental Protection Programs and Conservation Practices of Hotels in Ankara, Turkey", discussed the practices of protecting and conserving environment in Ankara's hotels in turkey. The results showed that 37.5% of hotels implemented green programs to protect environment. Also, the ratio of hotels that presented booklets about environmental protection to their customers reached only 27.5%. It also found that there was lack of awareness of environmental issues, and employees' participation in environmental protection conferences was very low. Furthermore, hotel managers did not have enough awareness concerning the ways of protecting and conserving environment and environmental sustainability.

# The Relation between Human Resource Green Competencies, Green Organizational Culture and Organizational Environmental Performance:

This part focus mainly on the impact of green organizational culture on the relation between human resources green competencies and organizational environmental performance. By reviewing the literature,

so rare studies discussed these three variables with each other and specially the impact of green culture and identity of employees and organizations on the relation between their natural or acquired green competencies and their green performance. However, the researchers try to highlight the studies that emphasize the role of green culture in affecting the relation between green competencies of human resources and their organizational environmental performance.

The study of Yong & Yusoff (2016) titled "Studying the influence of strategic human resource competencies on the adoption of green human resource management practices" aimed at discussing to what extent the skills and qualifications of employees, who are specialized in human resources affect the process of applying Green HRM practices in small and medium sized manufacturing and service companies in Malaysia. The study found that the role of professionals whom they have the ability to become "strategic petitioners" is linked to all Green HRM practices without exception. However, the role of change leader linked to green compensation and green job description. Moreover, two significant competencies human resource experts should have to apply Green HRM practices. These competencies are to have ability to implement strategies and be change leaders. Also, the study showed that the small number of employees in HR department, inexperienced employees, and little support from senior managers considered as obstacles in front of greening the culture.

Other researchers discussed the effect of managers competencies on green performance in their study under title "Effects of Project Manager Competency on Green Construction Performance: The Chinese Context" that aimed to assess the competencies that project managers had and their effect on "green construction" in China. It also highlighted the significant factors that guarantee "green building construction" success. It found that China was at a very early stage of "green building construction" since project managers there needs to take care of very significant features that had positive effect on building successful green performance. Its results presented a theoretical beginning for companies to effectively select project managers for "green building construction" (Sang & others, 2018).

The study of (Subramanian & others, 2016) titled "Green competence framework: evidence from China" conducted in industrial companies in one of Chinese cities discussed green competencies either acquired or natural. It aimed to discuss the impact of green personal competencies on green performance of organizations. The results showed that there was difference between acquired green competencies and natural green competencies regarding their relation with "individual green competencies" and "green behavior". It was clear that acquired green competencies had more positive relation to the two variables above-mentioned. It also confirmed the importance of acquired green competencies had a positive effect on firms since it helped them to determine green performance of individuals.

# Study Methodology

The descriptive analytical approach was adopted, as according to Achari (2014), the descriptive approach describes the state of affairs as it exists at present as it is reported by the researcher as it has happened. While, in the analytical approach the researcher has to use facts or information already available, and analyze these to make a critical evaluation of the material.

## **Study Data Sources**

The data sources are as follows:

- 1- The secondary data sources: include books, journals, papers, statistics, and web sites.
- 2- The primary data sources: questionnaire was developed and distributed to employees in government hospitals in the Gaza strip to collect data.

# **Study Population and Sample**

The population of this study composed of employees occupying nursing and administrative positions in three major government hospitals in the Gaza strip which are:

1- Al-Shifa Medical Complex.

A two stage stratified random sample was used to present the targeted population. The first stage was chosen the sample according to the government hospital where employees work, and the second stage was chosen the sample according to the job title. The sample size was calculated using the following equation (Moore et. al. 2003):

$$n = \left(\frac{Z}{2m}\right)^2$$

2- Nasser Medical Complex. 3- European Gaza Hospital.

Research Population and Sample							
Category	Nursing	A	dministrativ	ve 🛛	Total		
		Sample	Population	Sample	Population	Sample	
Al-Shifa Medi-	661	119	205	37	866	156	
cal Complex	(76.3%)	119	(23.6%)	37	(49.6%)	150	
Nasser Medical	335	61	129	23	464	84	
Complex	(72.1%)	01	(27.8%)	23	(26.6%)	64	
European Gaza	292	50	123	22	415	75	
Hospital	(70.3%)	53	(29.6%)	22	(23.8%)	/5	
Total	1288	233	457	82	1745	315	
iotal	(73.8%)	233	(26.2%)	62	1/45	515	

Table (1)

Source: Articulated by the Researcheres, 2018, based on (Palestinian Health Information Center, 2017,p:23)

The following table shows the distribution of the study population and sample.

# Study Tool Design and Data Measurement Scale:

A questionnaire was designed to study "The Impact of the Mediating Role of Green Organizational Culture on the Relation Between Human Resources Green Competencies and Organizational environmental performance in Major Palestinian Governmental Hospitals – Gaza Strip". The questionnaire included the following sections:

- 1- Section one: Includes personal traits of the research sample which are: (gender age educational qualification place of work job title tenure).
- 2- Section two: Includes human resources green competencies (12 items).
- 3- Section three: Includes green organizational culture (12 items).
- 4- Section four: Includes organizational environmental performance (13 items).

A 1 to 10 scale was used to answer the questionnaire items. As 10 indicates the highest level of approval, were 1 indicates the lowest level of approval. As it is explained in the following table:

Table (2)										
Data Measurement Scale										
Item Strongly Disagree										Strongly
neem	Disagree									Agree
Scale	1	2	3	4	5	6	7	8	9	10

The following steps were followed in order to design the questionnaire:

- 1- Review and utilize the available literature and previous studies related to study area.
- 2- Consult a number of academic and professional personnel from different universities and institutions.
- 3- Identify the main fields of the questionnaire and the items under each field.
- 4- The questionnaire was designed, reviewed, and modified by the researchers.
- 5- Again, a number of academic and professional personnel were approached as referees. Based on the referees' comments modifications were done as appropriate.

# Study Tool Validity and Reliability Testing

A pilot study sample of 25 questionnaires was distributed to help test the validity and reliability of the questionnaire according to the following:

- 1- Content Validity: 10 academic and professional personnel reviewed the questionnaire and provided valuable notes to improve its validity, as their comments were taken into consideration. Content validity of the questionnaire was conducted in order to assure that the content of the questionnaire is consistent with the study objectives, and problem statement. Modifications were conducted till the questionnaire appeared in its final form as it is presented in appendix (1).
- 2- Internal Validity: Internal validity of the questionnaire is used to test the validity of the questionnaire. It is measured through measuring the correlation coefficients between each item in a field and the whole field according to the following:
  - a- The internal validity of the human resource green competencies field:

#	ltem	Pearson Correla- tion Coefficient	P-Value (Sig.)
1	The job analysis contains environmental awareness skills that the employee should have.	.582*	0.000
2	Employees have enough knowledge and awareness of their responsibilities toward protecting environment and decrease pollution that lead to achieve tangible results.	.693*	0.000
3	The employees share their knowledge, especially with regard to environmental protection issues.	.666*	0.000
4	The job vacations ads of MOH focus on recruiting candidates who have eco-friendly skills and behaviors and who aware of environmental issues.	.680*	0.000
5	The management has a clear plan to recruit high qualified and eco-friendly candidates.	.722*	0.000
6	The management develops green training programs that focus on protecting environment and encourages holding them frequently.	.676*	0.000
7	The human resource department cares about green training that leads to create employees who are able to face many environmental problems and find suitable solutions for them.	.723*	0.000
8	The management holds high quality courses that have tangible results, which directly affect employees' behaviors toward protecting environment.	.780*	0.000
9	Evaluating employee performance depends on green standards prepared by the management.	.713*	0.000
10	Employees are provided with regular feedback to improve their practices related to environ	.573*	0.001
11	The management presents financial and nonfinancial rewards for the employee who presents creative ideas for green initiatives aims to protect environment and decrease pollution levels.	.607*	0.000
12	The management provides bonuses and incentives to the employee who proves his ability to adopt green practices in order to encourage him/her to continue at work that positively reflected on the general performance.	.727*	0.000

#### Table (3) Clarifies the Correlation Coefficient for Each Item of The Human Resource Green Competencies Field and the Total of the Field.

\* Correlation is significant at level  $\alpha \le 0.05$ 

Table (3) indicates that the p-values (Sig.) are less than 0.05, so the correlation coefficients of this field are significant at  $\alpha \leq 0.05$ . Thus, the items of this field are valid to measure what it was set for.

b- The internal validity of the green organizational culture field:

### Table (4) Clarifies the Correlation Coefficient for Each Item of The Green Organizational Culture Field and the Total of the Field.

No. Item		Pearson Correla-	P-Value
	o. Item	tion Coefficient	(Sig.)
	1 Employees are involved in formulating strategies to protect environment.	.657*	0.000
	The vision and mission of MOH take into consideration the environmental protection and sustainability issues.	.578*	0.000

The Impact of the Mediating Role of Green Organizational Culture ...

No.	ltem	Pearson Correla- tion Coefficient	P-Value (Sig.)
3	The management clarifies information and values related to environmental protection issues for employees.	.571*	0.001
4	The management encourages and supports green practices and behaviors in accordance with well-defined and predefined policies.	.781*	0.000
5	The management holds training programs to enhance social responsibility regarding environmental protection, reduce the depletion of natural resources, and decreasing damage against environment.	.791*	0.000
0	The management provides employees of the content of training courses on internet to mini- mize using papers, in addition to using remote communication.	.692*	0.000
7	The culture spreads among employees promotes green attitudes and behaviors, and attempts to reduce environmental pollution and depletion of natural resources.	.768*	0.000
8	The management has values and leadership styles that encourage environmental protection and promote green culture.	.631*	0.000
9	Employees have enough information about green organizational culture, which means creat- ing employees' desire to achieve sustainable environmental progress.	.800*	0.000
10	Managers are concerned to adopt and modify values and ideas related to environmental pro- tection and sustainability issues.	.864*	0.000
11	Employees in all departments share green values that address environmental problems, achieve environmental progress, and conserve natural resources.	.755*	0.000
12	The values, beliefs, and behaviors reflect a strong desire among employees to accomplish sus- tainability and environmental protection.	.788*	0.000

\* Correlation is significant at level  $\alpha \le 0.05$ 

Table (4) indicates that the p-values (Sig.) are less than 0.05, so the correlation coefficients of this field are significant at  $\alpha \le 0.05$ . Thus, the items of this field are valid to measure what it was set for.

c- The internal validity of the organizational environmental performance field:

## Table (5) Clarifies the Correlation Coefficient for Each Item of the Organizational Environmental Performance Field and the Total of the Field.

No.	ltem	Pearson Correla- tion Coefficient	P-Value (Sig.)
1	The Department has a formal environmental strategy to assess the environmental perfor- mance of hospitals.	.648*	0.000
2	The management sets specific objectives of environmental performance level and links them to the practices of hospital employees.	.807*	0.000
3	The achievements of the environmental protection objectives are monitored and reviewed, in addition to follow-up the implementation of environmental obligations	.692*	0.000
4	The performance management system of the institution is active and directly contributes in achieving the objectives related to protecting environment and natural resources.	.698*	0.000
5	The management evaluates employees' green performance levels to meet the objectives related to environmental protection, environmental progress, and sustainability of natural resources.	.745*	0.000
6	The management has a reward system encourages employees to improve their performance that linked to protecting environment and achieve sustainability of natural resources.	.829*	0.000
7	The management effectively and continuously evaluates and records employees green or eco-friendly practices and contributions.	.926*	0.000
8	The management gives incentives and rewards to employees based on their annual performance.	.674*	0.000
9	The management determines indicators for assessing the hospital environmental performance, such as an energy consumption and waste categorization according to the degree of risk.	.502*	0.003
10	Data are collected to prepare reports about the hospital's environmental performance.	.582*	0.000
11	Costs resulting from environmental damage are assessed	.759*	0.000
12	The management is concerned with directing and instructing employees of how to improve their performance to protect the environment and reduce pollution hazards.	.866*	0.000
13	The hospitals environmental performance is evaluated to determine the annual consumption of electricity, gas emissions, and the amount of materials being treated.	.761*	0.000

\* Correlation is significant at level  $\alpha \le 0.05$ 

Table (5) indicates that the p-values (Sig.) are less than 0.05, so the correlation coefficients of this field are significant at  $\alpha \le 0.05$ . Thus, the items of this field are valid to measure what it was set for.

3- Construct Validity: Construct (structural) validity is used to test the validity of the questionnaire structure by testing the validity of each field and the validity of the whole questionnaire. It is measured through measuring the correlation co-

efficient between one field and all the fields of the questionnaire that have the same level of scale.

Table (6) indicates that the p-values (Sig.) are less than 0.05, so the correlation coefficients of all the fields are significant at  $\alpha \le 0.05$ , so it can be said that the fields are valid to measure what it was set for.

Table (6) Clarifies the Correlation Coefficient of Each Field and the Whole Questionnaire

Nia		Field	Pearson Correla-	P-Value		
	No. Field		tion Coefficient	(Sig.)		
-	1	Human resource green competencies	.943*	0.000		
2	2	Green organizational culture	.935*	0.000		
	3	Organizational environmental performance	.924*	0.000		
* (	* Correlation is significant at level $\alpha < 0.05$					

4- Reliability of the Questionnaire: Cronbach's coefficient alpha test is used to test the reliability of the questionnaire. It ranged between 0.0 and + 1.0 and the higher values reflects a higher degree of internal consistency.

No.

1

2

3

Table (7) indicates the value of Cronbach's Alpha was in the range from 0.889 and 0.925. This range is considered high; the result ensures the reliability of each field of the questionnaire. Cronbach's Alpha equals 0.967 for the entire questionnaire, which indicates a high reliability of the entire questionnaire.

According to the previous results of testing the

validity and the reliability of the questionnaire's, it is clear that the questionnaire is valid, reliable, and ready for distribution as it is in its final form in appendix (1).

## Descriptive Analysis of the Sample Personal Characteristics:

#### 1- Gender:

Table (8) shows that 48.3% of the respondents are "males", and 51.7% of are "females". This is due to the conservative culture of the Palestinian society as the health institutions such as hospitals need female staff in all jobs specially nursing to consider the privacy of female patients. The female respondents in this research are more than male though the number of male employees in MOH are more than the number of female employees, this is due to the nature of the sample.

#### 2- Age:

Table (9) shows that 77.1% of respondents are less than 40 years, while 22.9% of respondents are 40 years or more. Though the Palestinian society is considered a young society, still another important reason for this percentage is that many employees stopped working as a result for the Palestinian fraction, and as a result new staff have been appointed in recent years. Also, the significant increase in the population size implies increase in the delivered health services size.

Table (8) Gender						
Gender	Frequency	Percentage				
Male	154	48.3				
Female	165	51.7				
Total	319	100				

Cronbach's

Alpha

0.889

0.914

0.925

0.967

Table (9)	
Age	

	0	
Age	Frequency	Percentage
Below 30 years	105	32.9
30 – 39 years	141	44.2
40 - 49 years	46	14.4
Above 50 years	27	8.5
Totaĺ	319	100

Table (7)	
Cronbach's Alpha for Each Field of the Questionnaire	

Field

Human resource green competencies

Green organizational culture

Organizational environmental performance

All Fields

#### 3- Educational Qualification:

Table (10) shows that the highest percent of the sample have bachelor degree because there are several positions in hospitals that require more qualified and professional staff. However, the minority of respondents have master degree (9.7%), still thiss indicates that there is an increasing desire among employees to have higher certificates in their educational fields.

#### 4- Place of work:

Table (11) shows that the majority of the respondents work in Al-Shifa Medical Complex since it is the biggest government medical complex in the Gaza strip. Moreover, the annual report of manpower in the health sector in Palestine shows that the manpower rate in Al-Shifa Medical Complex is 29%. However, both Nasser Medical Complex and Euro-

Educational QualificationFrequencyPercentageDiploma or lower10633.2Diploma or lower10633.2

Table (10)

**Educational Qualification** 

Total	319	100
Master degree	31	9.7
Bachelor degree	182	57.1
Diploma or lower	106	33.2

#### Table (11) Place of Work

Place of Work	Frequency	Percentage
Al-Shifa Medical Complex	160	50.2
Nasser Medical Complex	84	26.3
European Gaza Hospital	75	23.5
Total	319	100

pean Gaza Hospital form a percentage of 49.8% since the manpower rates of them are 15% and 13.4% respectively (Palestinian Health Information Center, 2017).

#### 5- Job Title:

Table (12) shows that the jobs of sampled employees are divided into three categories: health jobs, technical jobs, and administrative jobs. The table shows that the health jobs forms 50.1% which means the majority of the respondents works as health staff because health institutions require several jobs in this field compared to other fields such as technical or administrative. Moreover, 11.9% of respondents are technical staff and 38% of them are administrative staff since hospitals need technical employees for equipment maintenance in addition to administrative

Table (12)	
Job Title	

Job Thee						
Job Title	Frequency	Percentage				
Manager	13	4.1				
Engineer	25	7.8				
Maintenance technician	13	4.1				
Administrator	94	29.5				
Chief nurse	74	23.2				
Nurse	68	21.3				
Midwife	18	5.6				
Other	14	4.4				
Total	319	100				

employees to manage the departments and organize patients' records and financial procedures.

#### 6- Tenure:

Table (13) shows that the majority of the respondents sampled have less than 10 years of service and reach a percentage of 65.9 % because 77.1% of the respondents are below 40 years old as shown in table (5.2). However, 34.1% of them have 10 years of service or more. This significant difference between these two groups existed as a result of the hard political and economic situations in Palestine and espe-

	Table (13) Tenure							
Tenure Frequency Percen								
less than 5 years	93	29.2						
5-less than 10 years	117	36.7						
10-less than 20 years	62	19.4						
20 years or more	47	14.7						
Total	319	100						

cially in the governorates of the Gaza Strip that lead to increase unemployment rates, which in turn minimize years of service among young people. Moreover, the MOH recruited many employees in the last ten years because some employees stopped working and the health work requires continuous employment in line with the ever-increasing population in Palestine.

### Normality Testing

Kolmogorov-Smirnov test was used to examine normality as shown in the following table:

Table (14)

Kolmogorov-Smirnov Test

According to table (14) the p-value for each variable is greater than 0.05 level of significance, thus the distributions for the data follow the normal distribution. Therefore, parametric tests.are to be used for statistical data analysis purposes.

#	Dimension	Kolmogoro	ov-Smirnov
#	Dimension	Statistic	P-value
1	Green human resource competencies	0.541	0.932
2	Organization green culture	0.414	0.996
3	Organizational environmental performance	0.488	0.971
	All items of the Questionnaire	0.529	0.942

## **Statistical Analysis Tools:**

The data was analyzed using the following statistical analysis methods:

- Frequency and Descriptive Analysis: This analysis used to determine the measures of central tenden-1cy which are mean, mode, and median. These measures help the researcher to evaluate the results.
- Kolmogorov-Smirnov test of normality: It is a statistical test used to determine if the data follows 2normal distribution and it compared the sample with a normal distribution.
- 3-Pearson Correlation Coefficient for Validity: It is a statistical test used to measure correlation between variables.
- Cronbach's Alpha for Reliability Statistics: This test measures reliability of the questionnaire to deter-4mine whether it measures well what it should be designed for or not.
- One-sample T Test: This test compares the sample mean with a predefined value. It requires a random 5sample, independent data, and a normally distributed data.
- The mediating test: to determine the effect of the mediator variable on the relation between the inde-6pendent and the dependent variables.

## **Data Analysis:**

#

1 The jo

The mean, standard deviation, proportional mean, T test-value, were used for data analysis purposes for all fields and items of the questionnaire to determine the tendency and ranking according to the following:

#### The Independent Variable "Human Resource Green Competencies": 1-

Means and Test Values for "Human Resource Green Co	mpe	tenci	es″		
ltem	Mean	S.D	Proportional mean (%)	Test value	P-value (Sig.)
The job analysis contains environmental awareness skills that the employee should have.	4.81	2.70	48.06	-7.84*	0.000
Employees have enough knowledge and awareness of their responsibilities toward pro-					

Table (15)

	tecting environment and decrease pollution that lead to achieve tangible results.		66	46.58	-9.01*	0.000	2
3	The employees share their knowledge, especially with regard to environmental protection issues.	4.15 2.	56	41.46	-12.86*	0.000	10
4	The job vacations ads of MOH focus on recruiting candidates who have eco-friend- ly skills and behaviors and who aware of environmental issues.	4.42 2.	70	44.21	-10.42*	0.000	3
5	The management has a clear plan to recruit high qualified and eco-friendly candidates. $\sim$	4.26 2.	77	42.60	-11.14*	0.000	7
6	The management develops green training programs that focus on protecting envi- ronment and encourages holding them frequently.	4.18 2.	49	41.76	-13.07*	0.000	8

The Impact of the Mediating Role of Green Organizational Culture ...

#	ltem	Mean	S.D	Proportional mean (%)	Test value	P-value (Sig.)	Rank
7	The human resource department cares about green training that leads to create employees who are able to face many environmental problems and find suitable solutions for them.	4.35	2.63	43.48	-11.22*	0.000	5
8	The management holds high quality courses that have tangible results, which di- rectly affect employees' behaviors toward protecting environment.	4.39	2.77	43.89	-10.40*	0.000	4
ç							
1	Employees are provided with regular feedback to improve their practices related to environmental protection.	4.29	2.57	42.90	-11.86*	0.000	6
1	The management presents financial and nonfinancial rewards for the employee who presents creative ideas for green initiatives aims to protect environment and decrease pollution levels.		2.75	36.33	-15.30*	0.000	11
1	The management provides bonuses and incentives to the employee who proves his ability to adopt green practices in order to encourage him/her to continue at work that positively reflected on the general performance.		2.71	35.90	-15.82*	0.000	12
	All Items of the Field	4.24	2.19	42.42	-14.32*	0.000	-

\* The mean is significantly different from 6

Table (15) shows item "1" was ranked first by having the highest proportional mean valued 48.06%. where item "12" was ranked twelfth by having the lowest proportional mean valued 35.90%. In general, the items of the "Human Resource Green Competencies Field" were statistically negative with a proportional mean valued 42.42%. This indicates that the green human resource competencies are weak due to lack of financial support needed to help organizations to present green rewards and green training programs. Moreover, the lack of environmental knowledge and awareness leads to these weak results. Also, the lack of governmental regulations and procedures that enhance environmental protection and green practices create weak green human resource competencies.

This agrees with the results of (Sang et al., 2018), which indicated that that China is at a very early stage of green practices in construction field. This is due to the need for taking care of creating successful green performance by project managers.

This disagrees with the results of (Murga-Menoyo, 2014) which approved that universities and teaching centers in Spain have adopted significant steps to increase environmental awareness and develop green competencies. This occurs because of the need for developing social life and achieving progress in the quality of life.

## 2- The Mediator Variable "Green Organizational Culture"

Table (16)
Means and Test Values for "Green Organizational Culture"

#	ltem	Mean	S.D	Proportion- al mean (%)	Test value	P-value (Sig.)	Rank
1	Employees are involved in formulating strategies to protect environment.	3.99	2.71	39.91	-13.16*	0.000	11
2	The vision and mission of MOH take into consideration the environmental protec- tion and sustainability issues.	4.22	2.74	42.15	-11.57*	0.000	5
3	The management clarifies information and values related to environmental protec- tion issues for employees.	3.94	2.74	39.37	-13.36*	0.000	12

#		Mean	S.D	Proportion- al mean (%)	Test value	P-value (Sig.)	
4	The management encourages and supports green practices and behaviors in accor- dance with well-defined and predefined policies.	4.16	2.74	41.55	-11.96*	0.000	7
5	The management holds training programs to enhance social responsibility regard- ing environmental protection, reduce the depletion of natural resources, and de- creasing damage against environment.	4.47	2.59	44.73	-10.53*	0.000	2
е	The management provides employees of the content of training courses on inter- net to minimize using papers, in addition to using remote communication.	5.05	2.49	50.53	-6.77*	0.000	1
7	, The culture spreads among employees promotes green attitudes and behaviors, and attempts to reduce environmental pollution and depletion of natural resources.	4.27	2.75	42.74	-11.15*	0.000	4
8	The management has values and leadership styles that encourage environmental protection and promote green culture.	4.09	2.84	40.85	-11.99*	0.000	10
ç	Employees have enough information about green organizational culture, which means creating employees' desire to achieve sustainable environmental progress.	4.18	2.67	41.80	-12.12*	0.000	6
1	<sup>0</sup> Managers are concerned to adopt and modify values and ideas related to environ- mental protection and sustainability issues.	4.13	2.68	41.32	-12.41*	0.000	9
1	Employees in all departments share green values that address environmental prob- lems, achieve environmental progress, and conserve natural resources.	4.16	2.60	41.55	-12.63*	0.000	8
1	<sup>2</sup> The values, beliefs, and behaviors reflect a strong desire among employees to ac- complish sustainability and environmental protection.	4.32	2.78	43.25	-10.73*	0.000	3
	All Items of the Field	4.25	2.30	42.49	-13.61*	0.000	-

\* The mean is significantly different from 6

Table (16) shows item "6" was ranked first by having the highest proportional mean valued 50.53%. where item "3" was ranked twelfth by having the lowest proportional mean valued 39.37%. In general, the items of the "Green Organizational Culture Field" were statistically negative with a proportional mean valued 42.49%. This indicates that the organizational green culture is weak due to lack of clear vision, mission, and strategies that related to environmental protection and sustainability. Also, there is weak clarification regarding green values and information for employees in addition to green practices, behaviors, and attitudes. Moreover, there is obvious weakness concerning the process of sharing green values and the availability of desire among employees to participate in solving environmental problems and discussing green issues.

This agrees with the results of the study of (M Fayyazi, Shahbazmoradi, Afshar, & Shahbazmoradi, 2015) which approved that vagueness of green values was a significance obstacle in front of implementing green culture. This is because the environmental awareness in oil industry in Iran was still fragile despite the tangible governmental movements to increase awareness in several sectors such as education sector.

This disagrees with the results of the study of (Madsen & Ulhøi, 2001) which indicated that employees had great awareness of the environmental outcomes of their works and the policies related to environmental issues. This is occurred because the sampled companies were European Union companies where their governments concern of environmental issues and achieve tangible progress to make them more green through enacting environmental protection legislations, laws, and policies that lead to change culture to be green.

## 3- The Dependent Variable "Organizational Environmental Performance":

Table (17) shows item "4" was ranked first by having the highest proportional mean valued 46.80%. where item "6" was ranked thirteenth by having the lowest proportional mean valued 36.23%. In general, the items of the "Organizational Environmental Performance Field" were statistically negative with a proportional mean valued 43.42%. This indicates that the organizational environmental performance is weak

due to lack of formal environmental strategy to assess the environmental performance of hospitals. Also, this weakness occurs because the management is not mainly concern with directing employees of how to improve their green performance to protect the environment and reduce pollution.

# Mean S.D Proportiona mean (%)	P-value (Sig.)	Rank
The Department has a formal environmental strategy to assess the environmental 4.53 2.80 45.28 -9.35* performance of hospitals.	0.000	4
2 The management sets specific objectives of environmental performance level and 4.34 2.81 43.43 -10.45 links them to the practices of hospital employees.	* 0.000	8
The achievements of the environmental protection objectives are monitored and re- viewed, in addition to follow-up the implementation of environmental obligations	* 0.000	7
The performance management system of the institution is active and directly contrib- utes in achieving the objectives related to protecting environment and natural resources.	0.000	1
The management evaluates employees' green performance levels to meet the objectives related to environmental protection, environmental progress, and sustain- 4.46 2.66 44.58 -10.35 ability of natural resources.	* 0.000	5
The management has a reward system encourages employees to improve their performance that linked to protecting environment and achieve sustainability of 3.62 2.66 36.23 -15.91 natural resources.	* 0.000	13
The management effectively and continuously evaluates and records employees 4.26 2.66 42.58 -11.66 green or eco-friendly practices and contributions.	* 0.000	11
8 The management gives incentives and rewards to employees based on their annual 3.84 2.67 38.38 -14.38 performance.	<sup>*</sup> 0.000	12
The management determines indicators for assessing the hospital environmental 9 performance, such as an energy consumption and waste categorization according 4.65 2.61 46.52 -9.15* to the degree of risk.	0.000	2
10 Data are collected to prepare reports about the hospital's environmental performance. 4.44 2.61 44.39 -10.55		
11 Costs resulting from environmental damage are assessed4.33 2.73 43.30 -10.85	* 0.000	9
12 The management is concerned with directing and instructing employees of how to improve their performance to protect the environment and reduce pollution hazards. 4.56 2.67 45.57 -9.60*	0.000	3
The hospitals environmental performance is evaluated to determine the annual con- sumption of electricity, gas emissions, and the amount of materials being treated.	∗ 0.000	10
	* 0.000	

Table (17) Means and Test Values for "Organizational Environmental Performance"

\* The mean is significantly different from 6

This agrees with the results of the study of (Erdogan & Baris, 2007), which indicated that there was lack of awareness of environmental issues, and employees' participation in environmental protection conferences was very low. This is due to the lack of awareness concerning the ways of protecting and conserving environment and environmental sustainability among hotel managers

This disagrees with the results of the study of (Nguyen & Hens, 2015) which approved that Vietnam companies that had ISO 14001 certification achieved better Organizational environmental performance , this is due to the positive effects of this certificate in increasing employees' awareness, knowledge, and behavior concerning the way of protecting and preserving the environmental conditions and generally improving the green quality.

## **Hypotheses Testing:**

The hypotheses were tested as follows:

1- There is a statistical significant relationship at level  $\alpha \le 0.05$  between human resources green com-

petencies and organizational environmental performance. The Pearson correlation coefficient was used to test this hypothesis as illustrated by the following table:

Table (18) shows that the correlation coefficient equals 0.919 and the p-value (Sig.) equals 0.000 which is less than 0.05. This indicates the existence of a significant

Table (18)Correlation Coefficient Between Human Resource GreenCompetencies and Organizational Environmental Performance

The Hypothesis	Pearson Correla- tion Coefficient	
There is a statistical significant relation- ship at level α ≤ 0.05 between human resources green competencies and or- ganizational environmental performance	.919*	0.000

positive and strong relationship between human resources green competencies and organizational environmental performance. This is due to the importance of human resource green competencies that should be adopted by human resources in organizations which lead to achieve high level of organizational environmental performance.

This agrees with the study of (Paillé, Chen, Boiral, & Jin, 2014) which concluded that the organizational citizenship behavior for the environment had positive influence on the environmental performance of firms. This consistency appears due to the agreement between studies in literature on the positive relationship between HR green competencies and organizational environmental performance, so any progressive change in environmental performance requires change in employees' green competencies. Also this study agrees with the study of (Salem, Hasnan, & Osman, 2012) which approved that green competencies positively affect organizational environmental performance . However this disagrees with the results of (Salem et al., 2012) which indicated that there is insignificant relationship between organizational competencies and environmental performance.

2- There is a statistical significant impact at level  $\alpha \le 0.05$  of green organizational culture on the relation between human resources green competencies and organizational environmental performance. The "mediating test" was used to determine the effect of the mediator variable on the relation between the independent and the dependent variables. The mediator variable is considered to be a moderator if there is indirect and strong effect in case the bootstrap confidence interval does not contain zero, while in case the Bootstrap confidence interval contains zero there is direct and weak effect.

Table (19) shows that the size of indirect effect equals 0.4892 with bootstrap standard error of 0.074. The 95% bootstrap confidence interval is between 0.3777 and 0.6052. Since the bootstrap confidence interval does not contain zero, then there is indirect significant impact of the independent variable "Human Resources Green Competencies" on the dependent variable "Organizational Environmental Performance". Accordingly, there is significant impact of the mediator variable "Green Organizational Culture" on the relation between "Human Resources Green

Table (19) The Impact of Green Organizational Culture on the Relation between Human Resource Green Competencies and Organizational Environmental Performance

Variable	Effect	Standard Error	Confie Interval	dence of 95%
		Error	lower	Upper
Organization green culture	0.4892	0.074	0.3777	0.6052

Competencies" and "Organizational Environmental Performance" in Major Palestinian Governmental Hospitals in the Gaza Strip. This is due to the great positive significant impact of culture in general on adopting green competencies by human resources and therefore this impact indirectly affects the level of environmental performance of organizations. Thus, any positive change in implementing human resource green competencies that make a progressive change in the level of organizational environmental performance occurs through green organizational culture. This agrees with the results of (Jose Chiappetta Jabbour, 2011) study which clarified that improving EP depended mainly on achieving the determined environmental goals, which could be established through adopting green orientation in the organizational culture of companies.

This disagrees with the results of (Thevanes & Arulrajah, 2017) which practically approved that employees' green attitudes didn't have mediating role in the relationship between green training and the green trend adopted by organizations, this is due to experimental reasons appeared as a result of data collected from employees work in company in Sri Lanka.

# Conclusions

Lack of financial resources and unstable political situation lead to lack of real development in government hospitals in terms of environmental protection. Still, this is not an excuse as there are a lot of things that can be done better even with poor resources, but this was not available. The conclusions found are as follows:

- 1- Conclusions related to human resource green competencies field: It was concluded that human resource green competencies are generally very weak in the Palestinian government hospitals. This weakness is due to poor human resource management functions practices related to the following aspects:
  - a- The job analysis, job description, responsibilities, HR planning, recruitment, and selection activities are neither designed nor conducted to recruit and select high qualified and eco-friendly candidates, having environmental awareness and competencies.
  - b- Green training, knowledge sharing, and developmental efforts are neglected and not taken into consideration. These efforts are not green focus.
  - c- Performance appraisal and feedback doesn't appraise employees' environmentally friendly performance. Also, employees don't receive feedback related to their green practices and eco-friendly behaviors.
  - d- There is total absence of real green reward and compensation policy. As employees don't receive any financial or non-financial incentives and rewards in return for adopting green practices and behaviors.
- 2- Conclusions related to green organizational culture field: It was concluded that green organizational culture is generally very weak in the Palestinian government hospitals. This weakness is due to the following aspects:
  - a- The vision and mission of MOH don't take into account environmental protection issues. Moreover, employees' participation in formulating environmental related strategies is poor.
  - b- It was concluded that there are no real efforts to promote, disseminate, and present green cultures, values, and beliefs.
  - c- Managers' efforts to empower and encourage employees by integrating them into discussions to learn how to face environmental issues and find appropriate solutions for them is needed.
  - d- Manages' efforts to make information and values related to environmental protection issues clear for employees is weak.
  - e- It was found that employees' participation, involvement, and empowerment to adopt green behaviors is weak. Moreover, employees do not have enough awareness about green organizational culture.
  - f- It was found that employees' participation in local and international eco-friendly programs is very weak.

- 3- Conclusions related to organizational environmental performance field: It was concluded that organizational environmental performance is generally very weak in the Palestinian government hospitals. This weakness is due to the following aspects:
  - a- The Palestinian government hospitals represented by MOH do not have predetermined environmental plans and strategies to depend on.
  - b- There is no clear predetermined objectives, standards, and criteria to measure environmental performance levels.
  - c- There is no real mechanism to measure environmental performance and to clear things up.
  - d- The lack of inactive laws to encourage government institutions at health sector to measure their environmental performance.
  - e- The process of evaluating the current environmental situation of hospitals is generally weak.
  - f- Also, the efforts to direct employees to improve their environmental performance is also weak.
  - g- Moreover, the top managers' effort to prepare reports about the environmental performance and present evaluation of hospitals' environmental status is weak.

## Conclusions Related to Hypotheses Testing:

- a- It was concluded that there is a significant positive and strong relationship between green HR competencies and organizational environmental performance. This indicates that every positive development and improvement of human resource green competencies will lead to a positive development and improvement in organizational environmental performance. Thus, adopting and applying human resource green competencies, and achieving positive change and progress of implementing them lead to improve organizational environmental performance as well.
- b- It was included that green organizational culture has a significant and strong impact as a mediating variable on the relation between human resources green competencies and organizational environmental performance in major Palestinian governmental hospitals in the Gaza Strip. This means that any positive change in implementing human resource green competencies associated with positive change in the green organizational culture will lead to a more progressive change in the level of organizational environmental performance.

# **Recommendations:**

Based on the conclusions the following recommendations are presented:

- 1- The MOH needs to develop and adopt practical and applicable green HRM functions in order to enhance human resource green competencies. This can be achieved through developing green focus job analysis, job description, responsibilities, HR planning, recruitment, and selection. As this will lead to acquire highly knowledgeable, committed, aware, and competent employees who are capable of achieving high level environmental performance.
- 2- Therefore, it is recommended to consider and assess candidates' ability and compatibility with green performance requirements through the selection process.
- 3- The MOH is recommended to educate and train employees to develop employees' green competencies to positively change the environmental performance of health institutions. Also, spread, promote, and enhance environmentally friendly practices and environmental protection concerns.
- 4- It is a better option to continuously train employees about how to solve environmental problems and achieve sustainability of resources. Since conducting environmentally friendly training courses lead

to improve the external and internal environmental status of the government hospitals.

- 5- The MOH needs to develop and use performance appraisal systems to periodically assess and upgrade employees' green performance.
- 6- Employees need to receive regular feedback, as sharing evaluation results will motivate employees to carry out environmental protection responsibilities. Also, this will lead to improve employees, as well as, hospitals environmental performance.
- 7- The MOH is recommended to develop green rewards and compensation strategy to encourage employees to adopt eco-friendly behaviors and values. This will enhance employees' engagement in green practices, strengthen commitment, and develop green environmental performance.
- 8- The MOH needs to promote efforts to disseminate and encourage green culture, values, and beliefs among employees. As there is a real need for making actual change of employees' attitudes, values, and behaviors to enhance environmental development and performance
- **9-** It is recommended to support the desire of making real change among employees by the top managers in order to be eco-friendly persons. Through creating green employees who could have a strong desire to avoid negative practices and behaviors that is harmful to the environment.
- **10-** The MOH needs to design and initiate a clear environmental strategy and objectives to guide and assess hospitals' environmental performance, and avoid negative effects on environment and natural resources.
- 11- It is recommended to increase employees' involvement and participation in green activities through regular meetings, workshops, discussions ... etc., to discus and solve environmental issues and spread knowledge and share it with their colleagues.
- 12- It is recommended that top managers team up with employees to discuss environmental issues occurred in hospitals and other health institutions in order to achieve high environmental performance level and increase their awareness regarding environmental preservation.

# References:

- Achari, P. D. (2014). *Research Methodology*: Ignited Minds Edutech Private Limited.
- Ahmad, S. (2015). "Green human resource management: Policies and practices", *Cogent Business & Management*, 2 (1), 1030817.
- Boselie, P. & Paauwe, J. (2005). "Human resource function competencies in European companies", *Personnel Review*, 34 (5), pp. 550-566.
- Cardy & Selvarajan. (2006). "Competencies: Alternative frameworks for competitive advantage", *Business Horizons*, 49 (3), pp. 235-245.
- Daniel, P. & Amrik, S. (2013). "Supply chain professionals: A study of competencies, use of technologies, and future challenges", *International Journal of Operations & Production Management*, 33 (11/12), 1532-1554. doi: doi:10.1108/IJOPM-08-2010-0228
- Deb, T. (2009). *Compensation Management*: Excel Books.
- Dessler, G. (2014). *Human Resource Management*. Pearson.
- Erdogan, N. & Baris, E. (2007). "Environmental protection programs and conservation practices of hotels in Ankara, Turkey", *Tourism Management*, 28 (2), pp. 604-614.
- Fayyazi, M.; Shahbazmoradi, S.; Afshar, Z. & Reza Shahbazmoradi, M. (2015). *Investigating the barriers of the green human resource management implementation in oil industry,* (Vol. 5).
- Grolleau, G.; Mzoughi, N. & Pekovic, S. (2012). "Green not (only) for profit: An empirical examination of the effect of environmental-related standards on employees' recruitment", *Resource and Energy Economics*, 34 (1), pp. 74-92.
- Gürlek, M. & Tuna, M. (2018). "Reinforcing competitive advantage through green organizational culture and green innovation", *The Service Industries Journal*, 38 (7-8), pp. 467-491.
- Harris, L. C. & Crane, A. (2002). "The greening of organizational culture: Management views on the depth, degree and diffusion of change", *Journal of Organizational Change Management*, 15 (3), pp. 214-234.
- Hsu, E. B.; Thomas, T. L.; Bass, E. B.; Whyne, D.; Kelen, G. D. & Green, G. B. (2006). "Healthcare worker competencies for disaster training", *BMC Medical Education*, 6 (1), p. 19.
- Jose, C. & Jabbour, C. (2011). "How green are HRM practices, organizational culture, learning and teamwork? A Brazilian study", *Industrial and Commercial Training*, 43 (2), pp. 98-105.
- Liebowitz, J. (2010). "The role of HR in achieving a sustainability culture", *Journal of Sustainable Development*, 3 (4), p. 50.
- Liyin, S.; Hong, Y. & Griffith, A. (2006). "Improving environmental performance by means of empowerment of contractors", *Management of Environmental Quality: An International Journal*, 17 (3), pp. 242-257.
- Madsen, H. & Ulhøi, J. P. (2001). "Greening of human resources: environmental awareness and training interests within the workforce", *Industrial Management & Data Systems*, 101 (2), pp. 57-65.
- Masri, H. A. & Jaaron, A. A. (2017). "Assessing green human resources management practices in Palestinian manufacturing context: An empirical study", *Journal of Cleaner Production*, 143, pp. 474-489.
- Moore, D. S.; McCabe, G. P.; Duckworth, W. M. & Sclove, S. L. (2003). *The practice of business statistics*. Freeman, New York, NY.
- Murga, M. M. (2014). "Learning for a sustainable economy: Teaching of green competencies in the university", *Sustainability*, 6 (5), pp. 2974-2992.

- Nguyen, Q. A. & Hens, L. (2015). "Environmental performance of the cement industry in Vietnam: the influence of ISO 14001 certification", *Journal of Cleaner Production*, 96, pp. 362-378.
- Paillé, P.; Chen, Y.; Boiral, O. & Jin, J. (2014). "The impact of human resource management on environmental performance: An employee-level study", *Journal of Business Ethics*, 121 (3), pp. 451-466. doi: 10.1007/s10551-013-1732-0
- Palestinian Health Information Center. (2017). Annual report of manpower in the health sector in Gaza Strip, (pp. 1-33). Retrieved 25-9-2017, from <a href="http://www.moh.gov.ps">http://www.moh.gov.ps</a>.
- Pasqualini Blass, A.; Gouvea da Costa, S. E.; Pinheiro de Lima, E. & Borges, L. A. (2016). "Measuring environmental performance in hospitals: A framework and process", *Measuring Business Excellence*, 20 (2), pp. 52-64. doi: 10.1108/mbe-03-2015-0011
- Posarajan, A. (2018). Green recruitment: A new-fangled approach to attract and retain talent, *International Journal of Business Management & Research (IJBMR)*, 8 (2), pp 69-76
- Rae, K.; Sands, J. & Gadenne, D. L. (2015). "Associations between organisations' motivated workforce and environmental performance" *Journal of Accounting & Organizational Change*, 11 (3), pp. 384-405.
- Ramus, C. A. (2002). "Encouraging innovative environmental actions: What companies and managers must do", *Journal of World Business*, 37 (2), pp. 151-164.
- Renwick, D. W.; Redman, T. & Maguire, S. (2013). "Green human resource management: A review and research agenda", *International Journal of Management Reviews*, 15 (1), pp. 1-14.
- Sahu, R. K. (2009). *Performance Management System*: Excel Books.
- Salem, M. A.; Hasnan, N. & Osman, N. H. (2012). "The relationship between corporate environmental practices and the environmental performance", *International Journal of Scientific and Research Publications*, p. 64.
- Sang, P.; Liu, J.; Zhang, L.; Zheng, L.; Yao, H. & Wang, Y. (2018). "Effects of project manager competency on green construction performance: The chinese context", *Sustainability*, 10 (10), p. 3406.
- Subramanian, N.; Abdulrahman, M. D.; Wu, L. & Nath, P. (2016). "Green competence framework: evidence from China", *The International Journal of Human Resource Management*, 27 (2), pp. 151-172.
- Nadesan, Thevanes & Anton Arulrajah, Anthonypillai. (2017). The Mediating Effect of Environmental Attitude of Employee in the Relationship between Environmental Training and Environmental Orientation of Organization. *Journal of Human Resources Management and Labor Studies*. 5(1), pp. 1-16, 10.15640/jhrmls.v5n1a1.
- Trott, D. S. (2013). "The impact of green core competencies on green image and green innovation: An Indian perspective", *Paradigm*, 17 (1-2), pp. 81-87. doi: 10.1177/0971890720130109.
- Trumpp, C. & Guenther, T. (2017). "Too little or too much? Exploring U-shaped relationships between corporate environmental performance and corporate financial performance", *Business Strategy and the Environment*, 26 (1), pp. 49-68.
- Wagner, M. (2013). "Green human resource benefits: Do they matter as determinants of environmental management system implementation?", *Journal of Business Ethics*, 114 (3), pp. 443-456.
- Yong, J. Y. & Mohd Yusoff, Y. (2016). "Studying the influence of strategic human resource competencies on the adoption of green human resource management practices", *Industrial and Commercial Training*, 48 (8), pp. 416-422.
- Zoogah, D. B. (2011). "The dynamics of green HRM behaviors: A cognitive social information processing approach", *German Journal of Human Resource Management*, 25 (2), pp. 117-139.